

Release notes for ENDF/B Development n-016_S_036
evaluation

ENDF
B-VII.dev

April 26, 2017

- checkr Warnings:

1. A previous error halted parsing of the current section
MAT=1637, MF= 1, MT=451 (1): Parsing stopped

```
ERROR(S) FOUND IN MAT=1637, MF= 1, MT=451
SECTION CANNOT BE CHECKED FROM SEQUENCE NUMBER 143 TO 205
```

- checkr Errors:

1. A variable is outside the allowed ENDF range
MAT=1637, MF= 1, MT=451 (0): Variable range

```
ERROR(S) FOUND IN MAT=1637, MF= 1, MT=451
MOD = 3 OUT OF RANGE 0 - 0 RECORD NUMBER 143
```

2. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 2, MT=151 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1637, MF= 2, MT=151
SECTION 2/151 NOT IN DIRECTORY RECORD NUMBER 207
```

3. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 1 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 1
SECTION 3/ 1 NOT IN DIRECTORY RECORD NUMBER 213
```

4. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 2 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 2
SECTION 3/ 2 NOT IN DIRECTORY RECORD NUMBER 269
```

5. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 4 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 4
SECTION 3/ 4 NOT IN DIRECTORY RECORD NUMBER 292
```

6. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 16 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 16
SECTION 3/ 16 NOT IN DIRECTORY RECORD NUMBER 304
```

7. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 22
SECTION 3/ 22 NOT IN DIRECTORY RECORD NUMBER 311

8. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 28
SECTION 3/ 28 NOT IN DIRECTORY RECORD NUMBER 318

9. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 51 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 51
SECTION 3/ 51 NOT IN DIRECTORY RECORD NUMBER 324

10. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 52 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 52
SECTION 3/ 52 NOT IN DIRECTORY RECORD NUMBER 336

11. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 53
SECTION 3/ 53 NOT IN DIRECTORY RECORD NUMBER 348

12. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 54 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 54
SECTION 3/ 54 NOT IN DIRECTORY RECORD NUMBER 359

13. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 55 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 55
SECTION 3/ 55 NOT IN DIRECTORY RECORD NUMBER 370

14. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT= 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF= 3, MT= 91
SECTION 3/ 91 NOT IN DIRECTORY RECORD NUMBER 381

15. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT=102 (0): Directory (b)

- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 3, MT=102 | | |
| SECTION 3/102 NOT IN DIRECTORY | RECORD NUMBER | 391 |
16. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT=103 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 3, MT=103 | | |
| SECTION 3/103 NOT IN DIRECTORY | RECORD NUMBER | 406 |
17. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 3, MT=107 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 3, MT=107 | | |
| SECTION 3/107 NOT IN DIRECTORY | RECORD NUMBER | 413 |
18. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 4, MT= 2 (0): Directory (b)
- | | | |
|--|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 4, MT= 2 | | |
| SECTION 4/ 2 NOT IN DIRECTORY | RECORD NUMBER | 422 |
19. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 4, MT= 16 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 4, MT= 16 | | |
| SECTION 4/ 16 NOT IN DIRECTORY | RECORD NUMBER | 570 |
20. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 4, MT= 22 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 4, MT= 22 | | |
| SECTION 4/ 22 NOT IN DIRECTORY | RECORD NUMBER | 573 |
21. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 4, MT= 28 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 4, MT= 28 | | |
| SECTION 4/ 28 NOT IN DIRECTORY | RECORD NUMBER | 576 |
22. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 4, MT= 51 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 4, MT= 51 | | |
| SECTION 4/ 51 NOT IN DIRECTORY | RECORD NUMBER | 579 |
23. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 4, MT= 52 (0): Directory (b)

- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 4, MT= 52 | RECORD NUMBER | 620 |
| SECTION 4/ 52 NOT IN DIRECTORY | | |
24. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 4, MT= 53 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 4, MT= 53 | RECORD NUMBER | 658 |
| SECTION 4/ 53 NOT IN DIRECTORY | | |
25. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 4, MT= 54 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 4, MT= 54 | RECORD NUMBER | 696 |
| SECTION 4/ 54 NOT IN DIRECTORY | | |
26. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 4, MT= 55 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 4, MT= 55 | RECORD NUMBER | 734 |
| SECTION 4/ 55 NOT IN DIRECTORY | | |
27. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 4, MT= 91 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 4, MT= 91 | RECORD NUMBER | 772 |
| SECTION 4/ 91 NOT IN DIRECTORY | | |
28. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 5, MT= 16 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 5, MT= 16 | RECORD NUMBER | 802 |
| SECTION 5/ 16 NOT IN DIRECTORY | | |
29. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 5, MT= 22 (0): Directory (b)
- | | | |
|---|---------------|-----|
| ERROR(S) FOUND IN MAT=1637, MF= 5, MT= 22 | RECORD NUMBER | 908 |
| SECTION 5/ 22 NOT IN DIRECTORY | | |
30. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 5, MT= 28 (0): Directory (b)
- | | | |
|---|---------------|------|
| ERROR(S) FOUND IN MAT=1637, MF= 5, MT= 28 | RECORD NUMBER | 1013 |
| SECTION 5/ 28 NOT IN DIRECTORY | | |
31. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF= 5, MT= 91 (0): Directory (b)

- ERROR(S) FOUND IN MAT=1637, MF= 5, MT= 91
SECTION 5/ 91 NOT IN DIRECTORY RECORD NUMBER 1096
32. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT= 16 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 16
SECTION 12/ 16 NOT IN DIRECTORY RECORD NUMBER 1285
33. Missing a gamma spectrum for continuum of gammas
MAT=1637, MF=12, MT= 16 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 16
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
34. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT= 22 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 22
SECTION 12/ 22 NOT IN DIRECTORY RECORD NUMBER 1293
35. Missing a gamma spectrum for continuum of gammas
MAT=1637, MF=12, MT= 22 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 22
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
36. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT= 28 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 28
SECTION 12/ 28 NOT IN DIRECTORY RECORD NUMBER 1301
37. Missing a gamma spectrum for continuum of gammas
MAT=1637, MF=12, MT= 28 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 28
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
38. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT= 51 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 51
SECTION 12/ 51 NOT IN DIRECTORY RECORD NUMBER 1308
39. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT= 52 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 52
SECTION 12/ 52 NOT IN DIRECTORY RECORD NUMBER 1312

40. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT= 53 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 53
SECTION 12/ 53 NOT IN DIRECTORY RECORD NUMBER 1316
41. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT= 54 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 54
SECTION 12/ 54 NOT IN DIRECTORY RECORD NUMBER 1320
42. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT= 55 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 55
SECTION 12/ 55 NOT IN DIRECTORY RECORD NUMBER 1324
43. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT= 91 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 91
SECTION 12/ 91 NOT IN DIRECTORY RECORD NUMBER 1328
44. Missing a gamma spectrum for continuum of gammas
MAT=1637, MF=12, MT= 91 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=1637, MF=12, MT= 91
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
45. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT=102 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT=102
SECTION 12/102 NOT IN DIRECTORY RECORD NUMBER 1338
46. Missing a gamma spectrum for continuum of gammas
MAT=1637, MF=12, MT=102 (1): No gamma spectrum
- ERROR(S) FOUND IN MAT=1637, MF=12, MT=102
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15
47. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT=103 (0): Directory (b)
- ERROR(S) FOUND IN MAT=1637, MF=12, MT=103
SECTION 12/103 NOT IN DIRECTORY RECORD NUMBER 1352
48. Missing a gamma spectrum for continuum of gammas
MAT=1637, MF=12, MT=103 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=1637, MF=12, MT=103
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

49. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=12, MT=107 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=12, MT=107
SECTION 12/107 NOT IN DIRECTORY RECORD NUMBER 1361

50. Missing a gamma spectrum for continuum of gammas
MAT=1637, MF=12, MT=107 (1): No gamma spectrum

ERROR(S) FOUND IN MAT=1637, MF=12, MT=107
CONTINUUM PHOTONS REQUIRE A SECTION IN MF=15

51. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=14, MT= 16 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT= 16
SECTION 14/ 16 NOT IN DIRECTORY RECORD NUMBER 1372

52. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=14, MT= 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT= 22
SECTION 14/ 22 NOT IN DIRECTORY RECORD NUMBER 1374

53. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=14, MT= 28 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT= 28
SECTION 14/ 28 NOT IN DIRECTORY RECORD NUMBER 1376

54. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=14, MT= 51 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT= 51
SECTION 14/ 51 NOT IN DIRECTORY RECORD NUMBER 1378

55. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=14, MT= 52 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT= 52
SECTION 14/ 52 NOT IN DIRECTORY RECORD NUMBER 1380

56. Missing a section in directory so your directory is messed up. This error will break everything else
MAT=1637, MF=14, MT= 53 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT= 53
SECTION 14/ 53 NOT IN DIRECTORY RECORD NUMBER 1382

57. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=14, MT= 54 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT= 54
SECTION 14/ 54 NOT IN DIRECTORY RECORD NUMBER 1384

58. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=14, MT= 55 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT= 55
SECTION 14/ 55 NOT IN DIRECTORY RECORD NUMBER 1386

59. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=14, MT= 91 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT= 91
SECTION 14/ 91 NOT IN DIRECTORY RECORD NUMBER 1388

60. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=14, MT=102 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT=102
SECTION 14/102 NOT IN DIRECTORY RECORD NUMBER 1390

61. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=14, MT=103 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT=103
SECTION 14/103 NOT IN DIRECTORY RECORD NUMBER 1392

62. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=14, MT=107 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=14, MT=107
SECTION 14/107 NOT IN DIRECTORY RECORD NUMBER 1394

63. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=15, MT= 16 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=15, MT= 16
SECTION 15/ 16 NOT IN DIRECTORY RECORD NUMBER 1397

64. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=15, MT= 22 (0): Directory (b)

ERROR(S) FOUND IN MAT=1637, MF=15, MT= 22
SECTION 15/ 22 NOT IN DIRECTORY RECORD NUMBER 1501

65. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=15, MT= 28 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1637, MF=15, MT= 28
SECTION 15/ 28 NOT IN DIRECTORY          RECORD NUMBER    1588
```

66. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=15, MT= 91 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1637, MF=15, MT= 91
SECTION 15/ 91 NOT IN DIRECTORY          RECORD NUMBER    1642
```

67. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=15, MT=102 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1637, MF=15, MT=102
SECTION 15/102 NOT IN DIRECTORY          RECORD NUMBER    1950
```

68. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=15, MT=103 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1637, MF=15, MT=103
SECTION 15/103 NOT IN DIRECTORY          RECORD NUMBER    2472
```

69. Missing a section in directory so your directory is messed up. This error will break everything else

MAT=1637, MF=15, MT=107 (0): Directory (b)

```
ERROR(S) FOUND IN MAT=1637, MF=15, MT=107
SECTION 15/107 NOT IN DIRECTORY          RECORD NUMBER    2590
```

- fudge-4.0 Warnings:

1. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 0: total (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.40%

2. Cross section does not match sum of linked reaction cross sections
crossSectionSum label 1: (z,n) (Error # 0): CS Sum.

WARNING: Cross section does not match sum of linked reaction cross sections! Max diff: 0.11%

- fudge-4.0 Errors:

1. Energy range of data set does not match cross section range
reaction label 6: n + (S36_c -> S36 + gamma) / Product: S36_c / Decay product: gamma / Multiplicity: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (5140210.0 -> 20000000.0) vs (5140220.0 -> 20000000.0)

2. Energy range of data set does not match cross section range
reaction label 6: $n + (S36_c \rightarrow S36 + \gamma)$ / Product: $S36_c$ / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (5140210.0 -> 20000000.0) vs (5140220.0 -> 20000000.0)

3. Energy range of data set does not match cross section range
reaction label 6: $n + (S36_c \rightarrow S36 + \gamma)$ / Product: $S36_c$ / uncorrelated - energy - XYs2d: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (5140210.0 -> 20000000.0) vs (5140220.0 -> 20000000.0)

4. Calculated and tabulated Q values disagree.
reaction label 7: $n[\text{multiplicity: '2'}] + S35 + \gamma$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -9988886.922996521 eV vs -9891980. eV!

5. Calculated and tabulated Q values disagree.
reaction label 8: $n + H1 + P35 + \gamma$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -13195156.80769348 eV vs -1.30419e7 eV!

6. Energy range of data set does not match cross section range
reaction label 8: $n + H1 + P35 + \gamma$ / Product: γ / Distribution: / uncorrelated - angular - isotropic: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (13407700.0 -> 20000000.0) vs (13407600.0 -> 20000000.0)

7. Energy range of data set does not match cross section range
reaction label 8: $n + H1 + P35 + \gamma$ / Product: γ / uncorrelated - energy - XYs2d: (Error # 0): Domain mismatch (a)

WARNING: Domain doesn't match the cross section domain: (13407700.0 -> 20000000.0) vs (13407600.0 -> 20000000.0)

8. Calculated and tabulated Q values disagree.
reaction label 9: $S37 + \gamma$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: 4203752.708999634 eV vs 4313990. eV!

9. Calculated and tabulated Q values disagree.
reaction label 10: $n + He4 + Si32 + \gamma$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -9107935.193416595 eV vs -8999830. eV!

10. Calculated and tabulated Q values disagree.
reaction label 11: $H1 + (P36_s \rightarrow P36 + \gamma)$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -9730601.871734619 eV vs -8990920. eV!

11. Calculated and tabulated Q values disagree.
reaction label 12: $He4 + (Si33_s \rightarrow Si33 + \gamma)$ (Error # 0): Q mismatch

WARNING: Calculated and tabulated Q-values disagree: -4624861.379127502 eV vs -3954040. eV!

- njoy2012 Warnings:

1. Evaluation has no resonance parameters given
unresr...calculation of unresolved resonance cross sections (0): No RR

```
---message from unresr---mat 1637 has no resonance parameters  
copy as is to nout
```

2. Evaluation has no resonance parameters given
purrr...probabalistic unresolved calculation (0): No RR

```
---message from purrr---mat 1637 has no resonance parameters  
copy as is to nout
```

3. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
grouprr...compute self-shielded group-averaged cross-sections (0): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 16  
only mf4/mf5 provided
```

4. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
grouprr...compute self-shielded group-averaged cross-sections (1): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 22  
only mf4/mf5 provided
```

5. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
grouprr...compute self-shielded group-averaged cross-sections (2): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 28  
only mf4/mf5 provided
```

6. With the advent of the ENDF-6 format, it is possible to make evaluations that fully describe all the products of a nuclear reaction. Some carry-over evaluations from earlier ENDF/B versions also have this capability, but many do not. This message is intended to goad evaluators to improve things!
grouprr...compute self-shielded group-averaged cross-sections (3): GROUPR/conver (0)

```
---message from conver---cannot do complete particle production for mt= 91  
only mf4/mf5 provided
```